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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,247	07/25/2008	Kouchiro Takashima	293158US8PCT	2183
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
DAVIS, TONY O				
ART UNIT		PAPER NUMBER		
2629				
NOTIFICATION DATE		DELIVERY MODE		
08/01/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary**Application No.**

10/594,247

Applicant(s)

TAKASHIMA ET AL.

Examiner

TONY DAVIS

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-845)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/25/06, 1/03/11
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-12 are rejected under 35 U.S.C. 102(b)** as being anticipated by **Rosenberg et al. (US 2001/0035854)**, hereinafter referred to as Rosenberg.

Regarding claim 1, Rosenberg teaches A haptic function-provided input device (touchpad 16 of fig 1) that performs touch operation to slide on an input detection (planar, rectangular smooth surface exhibited in fig 1) plane (paragraph 24 and 23, fig 1), said device comprising: input detection (touchpad 16 of fig 1) means, which has the input detection plane (see touchpad 16 of fig 1), for detecting a touching position of an operation body and a sliding speed of the operation body (paragraph 25, 24, and 23, fig 1); computation means (host computer or local processor) for computing a vibration pattern based on the sliding speed detected by the input detection means (paragraph 32, 55, 53, and 57, fig 1 and 7); and vibration means (piezoelectric actuator 42 of fig 3) for vibrating the input detection plane based on the vibration pattern computed by the computation means (paragraph 37, 35-36, and 38-39, fig 3).

Applicant states in paragraph 77 of their specification, 'the input detection section (i.e. input detection means) 24 may be an input device such as a resistance film typed

one, a surface acoustic wave (AW) typed one, an optical typed one, or a multiple-stage typed tact switch', Rosenberg teaches touchpad 16 of fig 1 can be capacitive, resistive, or other sensing means, see paragraph 24. Applicant states in paragraph 80, a CPU constitutes an example of computational means. Applicant states in paragraphs 69 and 73, '...actuators 25a and 25b constituting the vibration means...Each of the actuators 25a-25f is constituted of a piezoelectric sheet or a piezoelectric element.'

Regarding claim 5, Rosenberg teaches An information input method for inputting information by performing touch operation to slide on an input detection plane (paragraph 24 and 23, fig 1), said method comprising the steps of: detecting a touched position and a sliding speed of an operation body that touches the input detection plane (paragraph 25, 24, and 23, fig 1); computing a vibration pattern based on the touched position and the sliding speed that are detected (paragraph 32, 55, 53, and 57, fig 1 and 7); and vibrating the input detection plane based on the computed vibration pattern (paragraph 37, 35-36, and 38-39, fig 3).

Regarding claim 9, Rosenberg teaches An electronic device (computer 10 of fig 1) comprising a haptic function-provided input device (touchpad 16 of fig 1) that performs touch operation to slide on an input detection plane and display means (display device 12 of fig 1) for displaying a display image based on information input by the input device (paragraph 22-25 and paragraphs 53-57, fig 1 and 7), wherein said input device includes: input detection means (touchpad 16 of fig 1), which has the input detection plane (planar, rectangular smooth surface exhibited in fig 1), for detecting a touching position of an operation body and a sliding speed of the operation body

(paragraph 25, 24, and 23, fig 1); computation means (host computer or local processor) for computing a vibration pattern based on the sliding speed detected by the input detection means (paragraph 32, 55, 53, and 57, fig 1 and 7); and vibration means (piezoelectric actuator 42 of fig 3) for vibrating the input detection plane based on the vibration pattern computed by the computation means (paragraph 37, 35-36, and 38-39, fig 3).

Applicant states in paragraph 77 of their specification, 'the input detection section (i.e. input detection means) 24 may be an input device such as a resistance film typed one, a surface acoustic wave (AW) typed one, an optical typed one, or a multiple-stage typed tact switch', Rosenberg teaches touchpad 16 of fig 1 can be capacitive, resistive, or other sensing means, see paragraph 24. Applicant states in paragraph 80, a CPU constitutes an example of computational means. Applicant states in paragraphs 69 and 73, '...actuators 25a and 25b constituting the vibration means...Each of the actuators 25a-25f is constituted of a piezoelectric sheet or a piezoelectric element.'

Regarding claim 2, Rosenberg teaches The haptic function-provided input device according to claim 1, wherein the computation means computes a vibration pattern of the input detection plane to generate vibrations from its low frequency and small amplitude to its high frequency and large amplitude, as the operation body goes away from a position where it has touched the input detection plane (paragraph 55, fig 7).

Regarding claim 3, Rosenberg teaches The haptic function-provided input device according to claim 1, comprising control means for controlling the input information variably based on the sliding speed (paragraph 25).

Regarding claim 4, Rosenberg teaches The haptic function-provided input device according to claim 1, comprising control means for controlling input information variably based on distance information on a distance from a point where the operation body touches the input detection plane to a point where its sliding then stops (paragraph 37 and 55).

Regarding claim 6, Rosenberg teaches The information input method according to claim 5, wherein when computing the vibration pattern, a vibration pattern of the input detection plane to generate vibrations from its low frequency and small amplitude to its high frequency and large amplitude is computed, as the operation body goes away from a position where it has touched the input detection plane (paragraph 55, fig 7).

Regarding claim 7, Rosenberg teaches The information input method according to claim 5, wherein an amount of the input information is adjusted on the basis of the sliding speed (paragraph 25).

Regarding claim 8, Rosenberg teaches The information input method according to claim 5, wherein the input information is selected on the basis of distance information on a distance from a point where the operation body touches the input detection plane to a point where its sliding then stops (paragraph 37 and 55).

Regarding claim 10, Rosenberg teaches The electronic device according to claim 9, wherein the computation means computes a vibration pattern of the input detection plane to generate vibrations from its low frequency and small amplitude to its high frequency and large amplitude, as the operation body goes away from a position where it has touched the input detection plane paragraph 55, fig 7).

Regarding claim 11, Rosenberg teaches The electronic device according to claim 9, comprising control means for controlling the input information variably based on the sliding speed (paragraph 25).

Regarding claim 12, Rosenberg teaches The electronic device according to claim 9, comprising control means for controlling the input information variably based on distance information on a distance from a point where the operation body touches the input detection plane to a point where its sliding then stops (paragraph 37 and 55).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Suzuki et al. (US 2001/0004861) discloses dance game apparatus with step-on base for dance game. Horiki (US 2002/0140667) discloses portable communication terminal. Tretiakoff et al. (US 2003/0134256) discloses Portable print reading device for the blind.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONY DAVIS whose telephone number is (571)270-5586. The examiner can normally be reached on M-Th 7:30 a.m.-6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quan-Zhen Wang can be reached on 571-272-3114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D./
Examiner, Art Unit 2629

/Quan-Zhen Wang/
Supervisory Patent Examiner, Art Unit 2629